

ABSTRACT OF THE DISCLOSURE

There is provided a process for pasteurizing in shell chicken eggs (2) carried in stacks (1) by placing the eggs in a heated fluid bath (4) having a temperature of between about 128 to 145 degrees F., allowing the eggs to dwell in the heated fluid bath until there is a log reduction of at least 4.6
5 of any Salmonella bacteria within the eggs, removing the eggs from the heated liquid bath and into a gaseous atmosphere (26), and contacting the eggs with an antibacterial fluid (28) containing an antibacterial agent. Preferably, the eggs are thereafter contacted with a sealant such as wax. In the gaseous atmosphere the eggs further pasteurize to at least a 5 logs
10 reduction of the bacteria by way of residual heat in the eggs. During cooling in the gaseous atmosphere, the eggs suck the antibacterial fluid into the eggs between the inside of the shells and the membranes and provide antibacterial barriers in the eggs.